ED 210 233

-SO 013 749

AUTHOR TITLE

Giannangelo, Duane M.: And Others Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula (Project Geography). Final Report.

Memphis State Univ., Tenn. Dept. of Curriculum and

Instruction.

SPONS AGENCY PUB DATE

National Science Foundation, Washington, D.C.

SPI-81-00953 GRANT

48p. NOTE

EDRS PRICE DE SCRIPTORS

MF01/PC02 Plus Postage. \*Curriculum Development: Geographic Concepts: \*Geography Instruction: \*Learning Activities: Program Descriptions: Program Evaluation: Secondary Education: \*Social Studies: Space: Summer Programs: Teacher Developed Materials: Urban Studies

ABSTRACT

This report describes a project designed to develop geography, based activities that could be used to supplement an ongoing social studies program. The purpose was to help secondary social studies teachers in the Memphis, Tennessee area develop geography based activities dealing with concepts of urban spatiality. The project staff organized and publicized through brochures and news releases to newspapers the four-week summer program to be held at Memphis State University. Fifty-six public school teachers were selected and organized into ten planning and writing task forces. Each task force was assigned to one of the following ten social. studies courses: Tennessee history: American history I: civics: economics I: introduction to social studies: American history II: American political behavior: economics II; sociology; and social interaction. Teachers designed each instructional module so that it would coincide with specific chapters in each textbook. The modules developed utilized a problem-solving approach, involve community resource people, and contain a wide variety of teaching methods-for example, games, films, role playing, and labs. A teacher's manual to accompany the activities was also developed. The activity mcdules are not included in this report. Project evaluation shows many positive reffects including improved public school-university relations and curriculum improvement. Included in the appendices are a list and definitions of geography concepts and the summer workshop agenda. (Author/RM) ·

\*\*\*\*\*\*\*\*

Reproductions supplied by EDRS are the best that can be made -from the original document.

U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION EDUCATIONAL RESOURCES INFORMATION

CENTER (ERIC) ☐ This document has been reproduced as

received from the person or organization. originating is

Minor changes have been made to improve reproduction quality ,

Points of view or opinions stated in this document do not necessanty represent official NIE position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Duane

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PROJECT TO INCORPORATE SPATIAL CONCEPTS OF URBAN GEOGRAPHY IN SECONDARY SOCIAL STUDIES CURRICULA

(PROJECT GEOGRAPHY)

.Summer, 1981

Department of Curriculum and Instruction College of Education Memphis State University

National Science Foundation

NATIONAL Washi	SCIENC	E FOU	MOATION
Washi	ngton. D	.C. 20	ŚŚÓ

# FINAL PROJECT REPORT

#### PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING

PART I-PROJECT IDENTIFICATION INFORMATION

Institution and Address

Memphis State University
Memphis / TN 38152

2. NSF Program
Pre-College Teacher Dev.

3. NSF Award Number SPI 81-00953

4. Award Period From 2/6/81 To 7/31/82 5. Cumulative Award Amount \$47,661.00

6. Project Title a

Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula

#### PART II-SUMMARY OF COMPLETED PROJECT (FOR PUBLIC USE)

The Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula was designed to develop geography based activities that could be used to supplement the ongoing social studies program. Fifty-six (56) public school teachers participated in developing the 1,250 student-oriented activities contained in the geography kit produced as a result of this program. Specific tasks accomplished in the project are described in the sequence of process objectives that follow:

Objective 1: Develop with secondary social studies teachers an understanding of basic geographical concepts dealing with how humans utilize space and interact with their environment in urban areas (specifically the Memphis Metropolitan Area and the Mississippi Floodplain).

Objective 2: Develop learning modules that emphasize the geographical aspects of the urban environment to supplement each social studies unit for grades 7-12.

Objective 3: Disseminate the supplemental modules to secondary schools in the Memphis area.

The positive concomitant effects, such as improved public school-university relations, curriculum improvement, attention to real community problems, and in-service type training, as well as the accomplishments of the main thrust of the project, reinforce the validity, the efficiency, and the progress that has taken place during this program.

. PART III-TECHNICAL INFOR	MATION (FOR P.	ROGRAM MAN	AGEMENT USES	<u>si</u> .	
ITEM [Check appropriate blocks]	NONE	ATTACHED	PREVIOUSLY		FURNISHED LY TO PROGRAM
·			FURNISHED	Check (√)	Approx. Date
a) "Abstracts of Theses + -	Х				`
o. Publication Citations	Х				
c. Data on Scientific Collaborators		X	-		
42 Information on Inventions	_ X				
c. Technical Description of Project and Results		X			
f. Other (specify)					
Principal Investigator Project Director Name (Typed)	3. Principal Inve	stigator/Project	Director Signature	•	4. Date

Duane M. Giannangelo, Ph.D.

(5-14) Supersedes All Prévious Editions

- Form Approved UMH No MRIOUS



#### PROJECT STAFF

- Dr. Duane M. Giannangelo. Project Director and Social Studies Specialist. Department of Curriculum and Instruction. Memphis State University.
- Dr. W. Theodore Mealor. Associate Project Director and Geography Specialist. Department of Geography. Memphis State University.
- Dr. John A. Masla. Curriculum Specialist. Department of Curriculum and Instruction. Memphis State University.
- Dr. John T. Matson. Geography Specialist. Department of Geography. Memphis State University.
- Dr John F. Thompson. Curriculum Specialist. Department of Curriculum and Instruction. Memphis State University.
- Dr. John Corbet. Geography Specialist. Department of Geography. Memphis State University.

# TABLE OF CONTENTS

Final Project Report - NSF Form 98A ii
Project Staff iii
Introduction
Pre-Project Activities 4
Module Development
Evaluation $\ldots$ 13
Accomplishments
Appendix A $\sqrt{\dots}$
Appendix B
Appendix C
Appendix 'D
Appendix E

#### INTRODUCTION

The Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula was designed to develop geography based activities that could be used to supplement the ongoing social studies program. Further, it was stipulated that social studies teachers along with university personnel would cooperatively plan and develop the curricular materials.

Specific tasks accomplished in the project are described in the sequence of process objectives that follows:

an understanding of basic geographical concepts dealing with how humans utilize space and interact with their environment in urban areas (specifically the Memphis Metropolitan Area and the Mississippi Fleodplain).

Objective 2: Develop learning modules that emphasize the geographical aspects of the urban environment to supplement the social studies units for grades 7-12.

objective 3: Disseminate the supplemental modules to secondary schools in the Memphis area.

on three premises. First, it is assumed that the process of curriculum development must involve educators from various area and levels of the profession, including representatives

from groups for whom the curriculum is intended. Effective curriculum development needs to be viewed as a system which involves personality structures in social settings as well as subject matter and instructional methodology. Thus, classroom teachers are viewed as an important element in curriculum development.

Second, an effective curriculum supplement must be somewhat comprehensive in scope. Curricular materials, instructional strategies, and learning modules must be designed to accommodate the interests and needs of relevant consumer groups. Consequently, the curriculum model used in the present study is designed to maximize its generalizability and transferability.

Third, it is necessary to identify organizing centers around which instructional strategies and curriculum materials can be organized.

Teachers were seen in the present research as having the technical expertise needed to develop a curriculum supplement and translate it into instructional strategies. Therefore, they had the primary responsibility for the development of the geography curriculum supplement. It was the task of the university educators to collaborate with and facilitate the efforts of the public school teachers. Ten instructional modules were developed to supplement ten social studies courses in the Memphis area secondary schools. These

modules deal with specific geography concepts of urban spatiality that directly relate to the course content.

Every module is divided into five sections and every section is intended to develop knowledges, understandings, and appreciations of a particular concept. These concepts are viewed as being easily included within the ongoing secondary social studies curriculum of the Memphis area schools.

Recognizing the need for an action oriented valuing process in social studies education, the model developed by Raths, Harmin, and Simon (1966) was used as one departure point for planning the ten instructional modules. As described by its developers, this model for valuing includes three steps: (choosing freely from among alternatives, after thoughtful consideration of the consequences of each alternative course of action, (2) public affirmation of the chosen alternative as an indication that the choice is cherished, and (3) doing something repeatedly with the choice in some pattern of life. This model suggests the need for three types of objectives and corresponding learning opportunities. It also suggests a sequence for these types of objectives and opportunities.

Since the first step in the valuing process entails the formulation and evaluation of a course of action, Bloom's (1956) taxonomy of cognitive behavior was used to formulate

specific objectives and structure learning activities for the instructional modules. The levels of cognitive behaviors identified by Bloom and his colleagues are organized in the following hierarchy:

- 1. Knowledge (lowest level of cognitive behavior)
- 2. Comprehension
- 3.. Application
- 4. Analysis
- 5. Synthesis
- 6. Evaluation (highest level of cognitive behavior)

Evaluation as defined by Bloom and his colleagues requires that reasons be given for selecting courses of action. For purposes of values clarification, Kohlberg's (1975) scheme of moral reasoning was used as a framework for evaluating and ordering the types of reasons which learners give for a selected course of action. The stages of moral reasoning identified by Kohlberg not only provide a basis for evaluating courses of action selected by a student or group of students, but also provide a basis for adjusting learning activities to the appropriate educational level of the student.

## PRE-PROJECT ACTIVITIES

Upon notification of Funding for the Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula, the project director began a multi-media

5

campaign to publicize the project. First, a brochure was designed and distributed to all secondary social studies teachers in the Memphis area. This brochure 1) described the general nature of the program; 2) enumerated the project objectives; 3) detailed information relating to project length, academic credit received, tuition waiver, sponsor support, meal allowance; 4) indicated those eligible to participate; 5) identified nationally recognized geographers who served as consultants; 6) identified Memphis State University project staff; 7) included an application form. (See Appendix A.)

Second, the Media Relations Office of Memphis State
University sent a news release to the local daily newspapers
and the Memphis area school system newsletters. This news
release detailed the salient aspects of the program. This
National Science Foundation project received good coverage
in a major area newspaper. (See Appendix B.)

Another pre-project task completed in March of 1980 was the securing of a commitment of the two outside consultants to interact with the project participants (secondary social studies teachers). Dr. Stanley D. Brunn of the University of Kentucky at Lexington and Dr. J. Dennis Lord of the University of North Carolina at Charolette worked with the local teachers developing geographical background in the area of urban spatiality.

Prior to the formal beginning of the program, the project staff at Memphis State University was involved in the preliminary module planning phase. This aspect of the grant dealt with reviewing all of the thirteen secondary social studies courses offered in the Memphis area schools. After perusing the curriculum guides and the textbooks, it was decided that ten (10) courses lent themselves extremely well to the goals of this project, Next, each of the selected courses was divided into five (5) appropriate sections. Each section was then assigned a geographical concept that could be easily and appropriately incorporated into the ongoing social studies curriculum. Thus, five (5) different geographical concepts for each of the ten (10) selected social studies courses or a total of fifty (50) geographical concepts related. to urban spatiality were identified. (See Appendix C.)

A major pre-project task was detailing the four week program for the university project staff, the project participants, and the external consultants. Each daily session lasted from 8:00 a.m. until 2:30 p.m. with a thirty (30) minute lunch break.

The final major pre-project task was the selection of project participants and organizing the ten (10) planning and writing task forces. All of the information needed to identify eligible teachers was provided on the application form included in the publicity brochure. Fifty-six (56)

teachers were selected and agreed to participate.

Each of the ten (10) planning and writing task forces was composed of five (5) or six (6) participants. Each task force was assigned to one (1) of the following ten (10) social studies courses:

- A. Tennessee History
- B. American History I
  - C. Civics
  - D. Economics I
  - E. Introduction to Social Studies
  - F. American History II
  - G. American Political Behavior
  - H. Economics II
  - I. Sociology
  - J. Social Interaction

#### . MODULE DEVELOPMENT

The activities in the ten (10) instructional modules were designed to include different modes of instruction and levels of knowledge in order that learning experiences would be significant for students of various ability levels. The modules also contained a wide variety of instructional materials and activities — games, films, field trips, simulations, role-playing, labs, discussions, and use of community resources. It was intended that these experiences should lead students toward "doing" rather than "talking".

about" problems and/or concerns in their environment.

Also included was an emphasis on involving significant community resource people in order to encourage more student—adult interaction. Most importantly, the program design was based on the belief that all activities should lead students toward an active role in actually proposing possible solutions to some of the significant problems and/or concerns they would encounter.

Each instructional module was designed so that it would coincide with specific chapters in each textbook. (See Appendix C.) The module activities may be self-selected by students or by the instructor in accordance with general curriculum objectives, available resources, and student interest. In addition, each module includes large and small group activities as well as individual learning opportunities.

Under the leadership of the university staff, all participants spent five and one half (5½) hours a day for three (3) weeks in June, 1981, developing the materials. The first major task of each team was to develop specific curricular objectives to accomplish the following primary goals:

1. Implementation of an action-oriented and community-based curriculum project dealing with the understanding of concepts of urban spatiality.



- 3. Education of citizenry in the process of problem solving and of making intelligent value choices that can be translated into courses of action.
- 4. Development of intelligent strategies and actions for solving specific urban spatial problems and/or concerns.
- 5. Achievement of a fuller understanding of the urban environment, problems that confront it, the interrelationships within the community, and opportunities for the individual to be effective in working toward the solution of urban spatial problems and/or concerns.

was the implicit focus around which the materials were designed. Thus the following global objectives for achieving the major goals were developed:

1. The students will have knowledge of and be able to apply the problem-solving process to spatial issues.

- 2. The students will be aware of spatial problems and/or concerns and work to a solution of at least one.
- 3. The students will be able to apply the valuing processes in the analysis of urban spatial issues.

The specific core objectives developed for the ten (10) instructional modules were as follows:

- of each module and will be able to define and describe a minimum of terminology/con-
- 2. The students will become involved with at least one specific problem and/or concern per module and derive a workable solution to each problem and/or concern.
- 3. The students will demonstrate ability to apply valuing processes by stating pros and cons of alternatives of at least one problem and/or concern explored in the module.

After the goals and objectives for the modules were developed, the teams began designing specific activities for accomplishing these goals and objectives. The time framework under which these major, tasks were accomplished is indicated in Appendix D.

In order for teachers to maximize the potential of the geography instructional materials, a teacher training manual was developed. This manual was designed so that it could be used by teachers on an individual basis. It is felt that the manual is comprehensive enough to insure proper implementation of the geography curriculum supplement.

abstract of the project as well as a section describing the need for this type of program, the goals of the project, and the philosophy and overview of the curricular materials. The teacher training manual also includes a definition of each of the fifty (50) concepts around which the modules were developed. Each instructional module contains five (5) subtopics. Within each of these subtopics, there are twenty-five (25) activities in which the students may choose to lengage. The definition of each module subtopic concept identifies the major objective for the group of learning experiences as well as the types of activities and materials included.

Since the entire program is based on utilization of a problem-solving approach, a significant portion of the teacher manual is devoted to this topic. It is the intent that teachers using these materials will first focus on the problem-solving process themselves in order to understand it, and then work with their students to help them

refine their own problem-solving skills. With this as a solid background, the teaching/learning process can then use this problem-solving skill to attack local spatial problems and/ or concerns.

In order to help teachers understand the problem-solving process, it is necessary to actually go through the process, step by step, and experience both the actual outcomes of each step as well as what happens in the process of determining the outcomes at each point. Through a series of exercises, teachers gain actual experiences in working with problems and the process. Rational/creative problem-solving processes are applied in doing these exercises.

Spatial utilization problems and issues are much more value problems than technical or social problems. Each of us has a value structure that strongly influences the selection of the various components of our life. In working with the problemsolving process, the values are at work there too. Those issues that a person labels a "problem" directly relate to her/his value structure. According to Raths, valuing is composed of prizing one's beliefs and behaviors, choosing one's beliefs and behaviors, and acting on one's beliefs. These are closely tied to the processes of problem-solving and in dealing with spatial issues. In order to gain an initial insight into the valuing process, the manual provides several suggested activities which individual teachers can pursue.

#### EVALUATION

The evaluation scheme used to determine the success of this project was twofold. First, the portion of the project devoted to developing geography background with the participants was assessed via pre-post test instrumentation. This evaluation focused on the teachers knowledge and understanding of the fifty (50) concepts upon which the instructional modules were developed.

TABLE 1

Comparison of Pre-Post Test Results of Participant
Knowledge and Understanding Spatial Concepts

Test	N	Standard Deviation	Mean Score t-Valae
Pre-test	56	7.6	<b>28.</b> 3 · , . ,
Post-test	. 56	8.8	43.6 -18.1*

<sup>\*</sup>Significant at the .01 level.

As indicated in Table 1, there was a mean gain of 15.3 points in the participants' scores on the fifty-five (55) item multiple choice instrument used to measure knowledge and understanding of the geographical concepts of spatial utilization. It seems reasonable to conclude that the variety of instructional activities that took place during week one of the project had the desired effect of increasing the academic competency of the participants to the level necessary for the development the geography curriculum supplement. It is important to note that the following types of instruction took place during that portion of the project:

1) lecture/discussion, 2) text reading assignments, 3) two external consultant speakers, 4) community field trip, 5) films, 6) slide presentations, 7) tape recordings. This variety of instructional techniques provided the participants an opportunity to internalize an understanding of the concepts rather than merely memorize the definitions of the concepts.

The second phase of the project evaluation was a continuous and ongoing evaluation of the module development. The project staff critiqued each of the activities developed by the ten task forces. Activities that were judged to be inappropriate or needed to be reworked or improved were returned to the appropriate task force with written comments and suggestions for improvement. The following criteria were evaluated in each module: 1) appropriate priateness of terminology utilized; 3) variety and appropriateness of activities to provide background information; 4) provision in the module for each student to identify a real problem and some possible solutions.

In addition to the project staff being involved in the second phase of the evaluation process, other educators not formally associated with the project evaluated randomly selected module components. These evaluations provided a nonbiased review of the project efforts. (See Appendix E for reviewers' comments.)

ACCOMPLISHMENTS

Highlighted below are some of the major accomplishments of the Project to Incorporate Spatial Concepts of Urban Geography

in Secondary Social Studies Curricula research, which are suggestive of the educational importance of this undertaking.

- One of the most significant accomplishments of the project is the provision for students to have direct involvement with real-life spatial issues in their own urban community. These students will be actively involved in a reality-oriented problem-solving process with continued follow-through. As noted in the professional literature, similar projects frequently involve students in artificial, remote, and preliminary Thus, these learning expesteps of problem-solving. riences are superficial and short-lived at best. the current project, however, the students will be engaged in identifying actual problems of urban spatiality in their everyday lives and pursuing the resolution of these problems through the problem-solving process. Meaningful solutions will be generated by students interacting with adults, community representatives, educators, and governmental agencies. significance of this accomplishment is that the students will be actively involved in designing their own educational experiences.
- 2. Another important accomplishment is that the modules originally created by the teachers during the summer of 1981 have been edited in such a way as to insure that

the creators will recognize them as teacher-designed products. The modules were not modified, edited, and revised by outside "experts" to such a degree that the teachers who originally developed them would feel they were being asked to use so-called "teacher-proof" imported instructional packages. In effect, the users had the major input in developing their own education tools.

- selves to a variety of instructional organizational patterns, i.e., self-contained classroom situation, non-graded approach, open education, multi-grade grouping, and individualized approaches. Materials were designed so that students can work independently in small groups or large groups while engaged in these problem-solving activities. Consequently, teachers with various styles or various teaching strategies can use these geography modules in a variety of teaching situations. These materials also are adaptable to students with varying ability levels.
- Another accomplishment of the project is the continuing development of the Memphis State University faculty with regard to urban spatiality. During the early phases of the project, it had become evident that professors in education responsible for teaching teachers

in the area of social studies needed more first-hand experiences with the concepts of human urban spatiality. The faculty involved in the current project has undertaken individual "professional growth" in this area. As a result of these initiatives, new activities are being introduced into existing college courses focusing on urban spatial issues.

- The Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula is impacting on the Memphis area school curriculum by filling the void that exists. Until the present, there was little geography content in the social studies curriculum. Through the current project, there is now an organized geography curriculum supplement at the secondary school level that is being employed in the 1981-82 academic year. Specific instructional strategies and leading activities developed through this project are also being incorporated into the social studies curriculum in the Memphis area schools.
- 6. One of the most significant aspects of this project, as reported by public school personnel, is that it has the involvement of administrators, curriculum specialists, supervisors, and teachers. This geography package was developed cooperatively by persons from various levels of the public school system and Memphis State University.

- Another outgrowth of this project is the increased.

  knowledge base regarding urban spatial problems in the community. This comes about by having the various target groups systematically analyze the spatial issues, that affect their daily lives.
- Another outgrowth of this project is the vehicle that this National Science Foundation grant provided for the Memphis State University personnel and Memphis area school personnel to collaborate on a cooperative basis. Together these two groups designed, developed, and demonstrated an effective working relationship among the various levels of educators from these two groups.
- 9. Several project staff members have had proposals accepted to make presentations summarizing the Project to Incorporate Spatial Concepts of Urban Geography in Secondary Social Studies Curricula at various conferences around the country. The staff members participating in these presentations are Dr. Duane M. Giannangelo (project director), Dr. W. Theodore Mealor (geography specialist), and Dr. John A. Masla (curriculum specialist).

ARPENDIX A

# SCIENCE FOUNDATION GRANT

PROJECT TO INCORPORATE
SPATIAL CONCEPTS OF
URBAN GEOGRAPHY
IN SECONDARY
SOCIAL STUDIES
CURRICULA

COLLEGE OF EDUCATION
DEPARTMENT OF
CURRICULUM AND INSTRUCTION
424 EDUCATION BUILDING
MEMPHIS STATE UNIVERSITY
MEMPHIS, TENNESSEE 38152

Memphis State University is offering a four week, six credit course dealing with the incorporation of geography in secondary social studies classrooms. You are invited to apply for participation in this course.

## **BACKGROUND**

The rapid population growth of metropolitan Memphis as well as other southern cities during the last three decades has introduced new spatial pressures and processes that previously had been experienced only by the large industrial cities of the north. The inmigration of lower economic southern blacks and whites as well as highly educated northerners and southerners in response to increased economic opportunity has initiated pervasive changes in land use admixtures and distributions throughout the urban area, caused modification of the physical environment, and has affected the general perception of the quality of life.

There is a need for a substantive as well as a relevent urban spatial geography component to be incorporated into the ongoing · curriculum. Urban spatial geography curriculum supplements must go beyond merely arousing affective awareness on the part of students and imparting isolated bits of information. The citizenry needs to be educated in the process of alaking intelligent value choices and of translating these choices into courses of action if it is to be - capable of doing more than merely being cognizant of its situation. The need exists for a human interaction curriculum supplement that combines affective awareness, knowledge, and cognitive abilities with an actionoriented model for valuing.

Classroom teachers have the technical expertise needed to develop curricula and

instructional modules. Therefore, they will assume the primary responsibility for the development of these materials. It will be the task of university personnel to develop a framework for these collaborative efforts.

# **OBJECTIVES**

- Develop an understanding of basic geographical concepts and generalizations dealing with human space utilization and interaction with urban environments—specifically the Memphis Metropolitan Area and the Mississippi Flood Plain.
- 2. Develop learning modules to supplement the social studies curriculum for grades 7-12 emphasizing the geographical aspects of the urban environment.
- 3. Dissemination of the supplemental modules to secondary schools in the Memphis area.

## **PROJECT DATES**

This project will begin on June 1, 1981 and end on June 26, 1981.

#### **ACADEMIC CREDIT**

Participants will be offered six semester hours of credit in the Department of Curriculum and Instruction at Memphis State University. In order to receive this credit, each participant must satisfactorily complete all of the course requirements.

#### **TUITION**

The normal tuition fees will be waived by Memphis State University.

# FINANCIAL SUPPORT

The National Science Foundation is providing support for this project.

#### **MEALS**

Each participant will be allotted \$3.00 per day for the noon meal.

## **ELIGIBILITY**

Teachers of social studies (grades 5-12) in the Memphis Area Schools are eligible to apply for this project.

## **APPLICATION**

To apply, participants should return the attached form. For further information you may call Dr. Duane M. Giannangelo at 454-2379. Application deadline is April 30, 1981.

# MEMPHIS STATE UNIVERSITY PROJECT STAFF

Duane M. Giannangelo, Project Director W. Theodore Mealor, Associate Director John H. Corbet, Jr., Department of Geography
John A. Masla, Department of Curriculum and Instruction
John T. Matson, Department of Geography
John F. Thompson, Department of Curriculum and Instruction

# CONSULTANTS

Dr. J. Dennis Lord University of North Carolina—Charlotte Dr. Stanley Brunn University of Kentucky—Lexington

# ERICNATIONAL SCIENCE FOUNDATION GRANT

2.7

# APPLICATION FOR PROJECT TO INCORPORATE SPATIAL CONCEPTS OF URBAN GEOGRAPHY IN SECONDARY SOCIAL STUDIES CURRICULA

NAMESOCIAL SECURI			INDICATE COURSES T 1980-1981 ACADEMIC	
HOME ADDRESS	(Street)			Social InteractionSocial StudiesSociology
HOME PHONE _	(City)	(Zip)	Economics Government Latin American Histo	World Geography
SCHOOL PHONE TEACHING CER	ΓΙFICATE#		Political Behavior  APPLICATION DEA  APRIL 30, 1981.	<b>DLINE:</b> An Equal Opportunity University

DR. DUANE M. GIANNANGELO
DEPARTMENT OF CURRICULUM AND INSTRUCTION
424 EDUCATION BUILDING
MEMPHIS STATE UNIVERSITY,
MEMPHIS, TENNESSEE 38152

YEARS TEACHING EXPERIENCE

APPENDIX B

# BEST COPY AVAILABLE

MEMPHIS PRESS-SCIMITAR, THURSDAY, MARCH 12, 1981

# Project to Assist Geography Teachers

Dr. Duane M. Giannangelo, assistant professor of education at Memphis State University, has been awarded a \$47.600 grant from the National Science Foundation to conduct a summer geography program for 70 Memphis area social studies teachers.

The grant, which is aimed at improving classroom instruction in science and mathematics. is one of several being funded throughout the nation for 7,000 middle and high school teachers.

The focus of the project is to instill within the teachers an understanding of geographical concepts pertinent in the education of students living in an urban environment.

The final product will be the integration of urban geography concepts of city site and situation, urban man-physical environmental relationships, urban area differentiation and urban spatial organization into the social science curriculum of the schools.

"The rapid growth of metropolitan Memphis and other southern cities during the past three decades has introduced new spatial pressures and processes that previously have been experienced only by the large industrial cities of the north," said Giannangelo.:

"The in migration of lower economic southern blacks and whites as well as highly educated northerners and southerners in response to increased economic opportunity has initiated pervasive changes in land use admixtures and distributions throughout the urban area."

He said these changes have brought about a modification of the physical environment and have affected the general perception of the quality of life.

Dr. John Masla. curriculum specialist from the MSU-Department of Curriculum and Instruction, said the spatial interrelationships of the human and physical components of the urban environmental are seldom understood, particularly by southerners of rural heritage.

"Most teachers in urban school systems of the South were trained in institutions that did not emphasize urban geography or urban problems," Masla said. "Conversely, most students in metropolitan school systems in the South were born in the city of at least first-generation urban parents, and many of these have no social or spatial ties with 'rural areas."

Although there are several packets of material available that deal with urban geography, including, "High School Geography Project" of the Association of American Geographers, Giannangelo and Masla said the emphasis of the proposed project will be to develop the skills of the teachers in preparing study units dealing with the concepts of urban geography:

The project requires summer participation by the teachers followed, in most cases, by some academic year activity."

Advanced teacher workshops involve full-time residence for participants drawn from the surrounding region with limited follow-up activity during the academic year.

Science training seminars are aimed at local commuting teachers and will involve more extensive academic year activities.

A total of 147 grants nationwide, valued at \$4.4 million, will support advanced teacher workshops and science training seminars in 43 states. Puerto Rico and the District of Columbia. Twelve projects involving teachers from both elementary and middle schools are being jointly funded by the NSF and U.S. Department of Education.

The MSU project will begin June 1 with sessions held at the Memphis Board of Education building.

Participating in the project along with Giannangelo and Masia are Dr. Theodore Mealor, associate director and chairman of the MSU Geography Department; Dr. John F. Thompson, instruction specialist from the MSU Curriculum and Instruction Department; Dr. John T. Matson, geography specialist, MSU Geography Department; and Dr. John H. Corbet, MSU Geography specialist.

APPENDIX C

# PROJECT TO INCORPORATE SPATIAL, CONCEPTS OF URBAN GEOGRAPHY IN SECONDARY SOCIAL STUDIES CURRICULA

#### GEOGRAPHY CONCEPTS

- PATTERNS OF AGRICULTURE The role of agriculture as a generator of wealth;

  the distribution of crops and systems of production and their

  impact on urban development.
- CENTRAL PLACE THEORY The relationship of one city with another and the development of a hierarchy of cities (one large city, many small cities).
- CHARACTER OF PLACE The spatial components and interrelationship of the human and physical environment that give identity to a particular place.
- COMPARATIVE AREAL ADVANTAGE The physical and/or human advantages that specific areas may have for some type of activity.
- COMPLEMENTARITY The ability of one area to pay for a good produced in another area. Without complementarity, trade between areas would not exist.
- CONSERVATION Principles of conserving and/or protecting the environment.
- CULTURAL PERCEPTION How people of varying cultures and beliefs' differ in their approach to environment and human activity.
- PATTERNS OF DEMOGRAPHY Distribution of people by age, life expectancies, ethnic groups, birth rates.
- ENERGY Distribution of energy, problems of extraction, transport and use.
- ENVIRONMENTAL HAZARDS Those elements of the physical environment harmful to human existence and caused by forces extraneous to him.
- ENVIRONMENTAL POSSIBILISM The natural environment sets a stage providing alternatives for human activity; humans will react to similar environments in different ways based on their culture.
- BASIS FOR FOREIGN TRADE The effects of location of raw materials, manufacturing, and markets on world trade.
- GEOGRAPHICAL BASIS OF POWER Distribution of resources and population in relationship to political boundaries and policies of national leaders.
- PATTERNS OF INDUSTRIALIZATIONS Geographic components of resources, transportation, labor, market, and comsumption that gave rise to industrial strength.
- PATTERNS OF MARKETS Markets are located in areas convenient to buyers.

  They also must be convenient to their suppliers. Markets have distinct spatial patterns that are hierarchical in nature and that are related to product, buying power, and distance.

- MENTAL MAPS Humans perceive locations and characteristics of areas in different ways. Our minds create a "map" of where and what we think things are. These images are based on our limited know-ledge of areas.
- THE METROPOLITAN AREA The city influences areas beyond its legal limits.

  The U.S. Census has several definitions of a metropolitan area that includes not only the legal area, but also areas that might appear to be rural.
- MULTIPLE NUCLEI THEORY (of Urban Growth) The concept that cities develop and grow based upon discrete generation of activities such as shopping centers, hospitals or industrial areas.
- OCCUPANCE How people occupy land; their organization of life space and the imprint this leaves on the earth's surface.
- PERCEPTION How people of various parts of the city perceive the political process.
- PERCEPTION OF NATURAL HAZARDS People perceive and respond to hazards, real or imagined, to their existence in many ways.
- PATTERNS OF POLITICAL ACTIVITY The distribution of political activity (e.g. voting behavior) related to the distribution of city demography.
- POLITICAL GEOGRAPHY The effect of human and environmental spatial patterns on political organization, particularly at the local level.
- POLITICAL SYSTEMS Patterns of governmental types of related to production and trade (e.g. Memphis and Taiwan; Sales of I-H equip. overseas)
- POLLUTION Air and water are effected by urban development. Activities in the city increase the level of pollutants in the atmosphere and in streams that can adversely affect urban growth and the health of urban residents.
- RADIAL SECTOR THEORY (of Urban Growth) The concept that cities develop and srow in a concentric ring pattern that is influenced by major transportation routes.
- RESOURCE BASE Resources of energy and raw materials are two the ingredients necessary for industrialization. The location of these must be considered in any type of industrial development.
- RESOURCE DISTRIBUTION Location and distribution of raw materials and energy resources necessary for industrial development.
- SCALE The ratio of map distance to earth distance. The approach we take to solving an areal problem is dependent upon whether or not we view it as covering a large area or small area -- therefore the scale is important as we consider change.
- PROCESS OF SETTLING The manner in which a group of people move into an area, adjust to its environment and culture is known as settling. The process of settling is based upon culture, level of technology, economic aspirations and the perception of the area being settled.

- SPATIAL DIFFUSION The transfer and acceptance of political ideas, philosophies, and issues from one group of people to another.
- SPATIAL DISTRIBUTIONS All human activities and physical features are distributed in some fashion over the earth's surface. These patterns, when examined, exhibit rationality and are explainable.
- SPATIAL INTERACTION How humans interact across space (includes attributes of both physical and human environment).
- SPATIAL BEHAVIOR IN URBAN AREA People have certain traits of movement within the city such as trips for shopping and trips to work.

  "This behavior influences land uses, location of activities, and transportation patterns.
- SUBSTITUTION The ability of a group of people to substitute one product for another thereby causing shifts in the geographic distribution of resources and production.
- TECHNOLOGY The relationship of technology to increasing man's utilization of natural resources and its effect on environment.
- TERRAIN ANALYSIS The configuration of the earth's surface of landforms
- TERRITORIALITY The geographic space(s) within which people operate (personal, room, neighborhood, city...)
- TRANSFERABILITY The ability of a good to withstand the cost of transportation.

  If the product is not transferable or cannot stand the cost of long distance hauling, then it will have limited utility.
- URBAN ENVIRONMENT PROBLEMS Soil erosion and water and air pollution are major environmental problems in the city. Other environmental problems include noise, damage to vegetation, and vectors.
- URBAN LANDUSE Cities are characterized by a variety of landuses and distinctive patterns can be found in all cities. The admixtures of the landuses give character to a city and affect the lives of all who live in the city.
- SPATIAL PATTERNS OF URBANIZATION Cities expand over areas in distinctive patterns that relate to landforms, water, and other environmental phenomena.
- URBAN PLANNING Planning of resources and available Tand are necessary to provide for rational growth of cities. The urban planning process considers human and environmental characteristics in an effort to assure all residents and activities orderly development.
- urban areas expand. Not only is farm land lost to urban growth, but the character of the rural population is changed from an agricultural orientation to an urban orientation.
- DISTRIBUTION OF WEALTH Wealth as determing factor in resource development, allocation, and utilization.



# PROJECT TO INCORPORATE SPATIAL CONCEPTS OF URBAN GEOGRAPHY IN SECONDARY SOCIAL STUDIES CURRICULA

TASK FORCE CONCEPTS

# TENNESSEE HISTORY Your Tennessee Code: .TH7

Modulle 1,	Chapters 1;2,26	Concepts Regionalization - The character of a place as expressed
2	ATT	Situation - How a place relates to areas outside its immediate vicinity; includes environmental and
3	. AII · ·	human characteristics.  Site - A place and its immediate vicinity, including its
		environmental characteristics.  Sequence Occupance - The changing manner of man's
<b>4</b>	3,4,11,	occupation of area as reflected in landholdings and landuse.
, 5, <del>*</del>	2,6,10, 11,16	Sense of place - Components of our identity with a specific place a place where we belong.
AMERICAN H History of Code: AH1	Free Peopl	<u>e</u>
Module 1	Chapters pp. 2-11	Concepts Terrain Analysis - The configuration of the earth's surface of landforms.
2	12,16	Environmental Possibilism - The natural environment sets a stage providing alternatives for human activity; humans will react to similar environments in different ways based on their culture.
3	15	Patterns of Industrializations - Geographic components of resources, transportation, labor, market, and consumption that gave rise to the industrial strength of the United States.
4	15	Spatial Patterns of Urbanization - Cities expand over areas in distinctive patterns that relate to landforms, water, and other environmental phenomena.
<b>5</b>	19,24	Comparative Areal Advantage - The physical and or human advantages that specific areas may have for some

.AMERICAN.HISTORY Freedom's Trail Code: AH8

of the area being settled.  21,24, Geographical Basis of Power - Disbribution of resources and population in relationship to political boundari and operations of national leaders.  4 7,9,17, Spatial Interaction - How humans interact across space (includes attributes of both physical and human environment).	Module 1	Chapters p.29, ch.16	Concepts Mental Maps - Humans perceive locations and characteristic of areas in different ways. Our minds create a "map" of where and what we think things are. These images are based on our limited knowledge of areas.	S
and population in relationship to political boundars and operations of national leaders.  7,9,17, Spatial Interaction - How humans interact across space (includes attributes of both physical and human environment).	2	3,4,8,	people move into an area, adjust to ats environment and culture is known as settling. The process of settling is based upon ones culture, level of technology, economic aspirations, and the perception	
21,25 (includes attributes of both physical and human environment).	3	•	and population in relationship to political boundarie	Ş
's '1 2 3 Occupance - How meonle occupy land; their organization of	-, 4 ., •		(includes attributes of both physical and human	
8,9,11, Tife space and the imprint this leaves on the earth' 12,16,18 surface.	` <b>5</b>		Occupance - How people occupy land; their organization of life space and the imprint this leaves on the earth's surface.	;

AMERICAN POLITICAL BEHAVIOR American Political Behavior Code: PB12

Part 5

Modu1	е	Chapters
1	_,→	Part 1,2

Concepts

Spatial Diffusion - The transfer or acceptance of political ideas, philosophies, and issues within the city.

Patterns of Political. Activity - The distribution of Part 2 political activity (voting behavior) related to the distribution of city demography.

> Urban Landuse - Cities are characterized by a variety of landuses and distinctive patterns can be found in all cities. The admixtures of the landuses give character to a city and affect the lives of all who live in the city.

- Perception How people of various parts of the city perceive the political process.
- The Metropolitan Area The city influences areas beyond its legal limits. The U.S. Census has several definitions of a metropolitan akea that includes not : only the legal area, but also areas that might appear to be rural.

INTRODUCTION TO SOCIAL STUDIES

Social Sciences - Concepts and Values: Sources of Identity
Code: TSS

2

Module
1 Chapters Concepts
Environmental Hazards - Those elements of the physical environment harmful to human existence and caused by forces extraneous to him.

Part 11, Character of Place - The spatial components and interIII relationship of the human and physical environment
that give identity to a particular place.

Part III Cultural Perception - How people of varying cultures and beliefs differ in their approach to environment and human activity!

Part IV Political Geography - The effect of human and environmental spatial patterns of political organization, particularly at the local level.

Part V Technology - The relationship of technology to increasing man's utilization of the environment.

SOCIAL INTERACTION
The Social Sciences - Concepts and Values: Settings for Change

Module

Part I

Concepts

Territoriality - The geographic space(s) within which people operate (personal, room, neighborhood, city...).

Part II · Spatial Distributions - All human activities and physical features are distributed in some fasion over the earth's surface. These patterns, when examined, exhibit rationality and are explainable.

Part II. Scale - The ratio of map distance to earth distance.

III. The approach we take to solving an areal problem is dependent upon whether or not we view it as covering a large area—or small area -- therefore the scale is important as we consider change.

Part IV, Radial Sector Theory (of Urban Growth) - The concept that cities develop and grow in a concentric ring pattern that is influenced by major transportation routes.

Part IV, Multiple Nuclei Theory (of Urban Growth) - The concept that cities develop and grow based upon discrete generation of activities such as shopping centers, hospitals, or industrial areas.

CIVICS			
Americ	an	Civi	CS
Code	C9	٠,	

Module 1	Chapters 23	Concepts Conservation - Principles of conserving and/or protecting the environment.
, 2	21	Spatial Behavior in Urban Area - People have certain traits of movement within the city such as trips for shopping and trips to work. This behavior influences land use, location of activities, and transportation patterns.
3	21	Urban Planning - Planning of resources and available land are necessary to provide for rational growth of cities. The urban planning process considers human and environmental characteristics in an effort to assure all residents and activities orderly development.
4	23	Energy - Distribution of energy, problems of extraction, transport, and use.
5	19,20	Basis for Foreign Trade - The effects of location of raw materials, manufacturing, and markets on world trade.

### ECONOMICS Fundamentals of the American Free Enterprise System

Module Chapters	Concepts
1 1,2	Resource, Base - Resources of energy and raw materials are
r	two of the ingredients necessary for industrialization.
,	The location of these must be considered in any type
• • • • • • • • • • • • • • • • • • • •	of industrial development.
•	
2 \ 11	Pollution - Air and water are effected by urban development.
<b>→</b>	Activities in the city increase the level of
•	- 'pollutants in the atmosphere and in streams that can
	adversely effect urban growth and the health of urban
•	residents.
•	
3 • ` 1	Political Systems - Patterns of governmental types as
·	, related to production and trade (e.g. Memphis and

Transferability - The ability of a good to withstand the cost of transportation. If the product is not transferable or cannot stand the cost of long distance hauling, then it will have limited utility.

Taiwan; Sales of I-H equipment overseas).

Complementarity - The ability of one area to pay for a good produced in another area. Without complementarity, trade between areas would not exist.

ECONOMICS

Economics: Principles and Practices

Code: E12

Modu 1e

¬Coπcepts Chapters

Resource Distribution - Location and distribution of raw materials and/energy resources necessary for industrial development.

Substitution - The ability of a group of people to substitute one product for another themeby causing. shifts in the geographic distribution of resources and production.

- 19,21, 22
- Distribution of Wealth Wealth as determining factor in resource development, allocation, and utilization.
- .23
- Patterns of Agriculture The role of agriculture as a generator of wealth, the distribution of crops and systems of production and their impact on urban development.
- 5,6,23

Patterns of Markets - Markets are located in areas convenient to buyers. They also must be convenientto their suppliers. Markets have distinct spatial patterns that are hierarchical in nature and that are related to product, buying power, and distance.

SOCIOLOGY Inquiries in Sociology Code: S12

Modu le

Concepts

Chapters Patterns of Demography - Distribution of people by age, Part 1. life expectancies, ethnic groups, birth rates. 2,3

pp. 159-171: 254-

269

Perception of Natural Hazards - People perceive and respond to hazards, real or imagined, to their existence in many ways.

Urban/Rural Conflict - Rural areas are impacted in a variety of ways as urban areas expand. Not only is farm land lost to urban area, but the character of the rural population is changed from an agricultural orientation to an urban orientation:

Central Place Theory - The relationship of one city with another and the development of a hierarchy of cities (one large city, many small cities).

171: Part.

Urban Environment Problems - Soil erosion and water and air pollution are major environmental problems in the city. Other environmental problems include noise, damage to vegetation, and vectors.

APPENDIX D

# PROJECT TO INCORPORATE SPATIAL CONCEPTS OF URBAN GEOGRAPHY IN SECONDARY SOCIAL STUDIES CURRICULA

#### - WEEK 1

#### MONDAY, JUNE 1

#### Morning Session

Welcome - Thomas G. Carpenter, President Memphis State University

Fred D. Johnson, Assistant Superintendent Shelby County Schools

Marshall C. Perritt, Deputy Superintendent Memphis City Schools

Introductions - Duane M. Giannangelo

Project Overview - Duane M. Giannangelo

Geography Concept Pre-Test (Post-test will be administered on Monday morning, June 15.)

Geography: Its Role and Scope in the Social Studies Program
W. Theodore Mealor
Department of Geography
Memphis State University

Participant Régistration

#### Afternoon Session

Geographical Tour of Selected Areas of the Memphis Area

#### TUESDAY, JUNE 2

#### Morning Session

Project participants work with Dr. J. Dennis Lord, consultant from the University of North Carolina (Charlotte), developing geographical background.

Concepts of Location and Distribution
John Matson
Department of Geography
Memphis State University

#### Afternoon Session

Project participants work with Dr. J. Dennis Lord developing geographical background.

#### WEDNESDAY, JUNE 3

#### Morning Session

Project participants work with Dr. J. Dennis Lord developing geographical background.

Environmental Concepts: Weather/Climate - John Corbet
Department of Geography
Memphis State University

#### Afternoon Session

Project participants work with Dr. J. Dennis Lord developing geographical background.

#### THURSDAY, JUNE 4

#### Morning Session

Project participants work with Dr. Stanley Brunn, consultant from University of Kentucky (Lexington), to develop geographical background.

#### Afternoon Session

Project participants work with Dr. Stanley Brunn developing geographical background.

#### FRIDAY, JUNE 5

#### Morning Session

Project participants work with Dr. Stanley Brunn developings geographical background.

Concepts of Urban Landscape - John Matson

### Afternoon Session

Project participants work with Dr. Stanley Brunn developing geographical background.

#### WEEK 2

#### MONDAY, JUNE 8

#### Morning Session

Problem Solving Approaches - John F. Thompson
Department of Curriculum and Instruction
Memphis State University

John A. Masla Department of Curriculum and Instruction Memphis State University

#### Afternoon Session

Problem Solving Approaches - John F. Thompson
John A. Masla

#### TUESDAY, JUNE 9

#### Morning Session

Task Force Assignments - Duane M. Giannangelo

Problem Solving in Secondary Social Studies Classrooms - John F. Thompson John A. Masla

Module Development - John F. Thompson

#### Afternoon Session

Task Force Strategy Session

Activity Development - Each person must have six (6) activities completed by 3:00 P.M.

#### WEDNESDAY, JUNE 10

Task Force Conference

Activity Development - Each person must have six (6) activities completed by 3:00 P.M.

#### THURSDAY, JUNE 11

Maps As A Geographic Tool - John Matson

Task Force Conference

Task force editing and refining of the thirty-six (36) activities.

Activity Development - Each person must have eleven (11) activities completed by 3:00 P.M., Friday, June 12.

#### FRIDAY, JUNE 12

Activity Development - Each person must have eleven (11) activities completed by 3:00 P.M.

WEEK 3

#### MONDAY, JUNE 15

Geography Concept Post-Test

Task Force Conference

Task force editing and refining of the additional sixty-six (66) activities.

#### TUESDAY, JUNE 16.

Physical Environment of Urban Areas - John Corbet

Each task force is to have one (1) module folder completed and turned in to the project director by noon.

Activitý Development - Each person is to have five (5) activities completed by 3:00 P.M.

Task Rorce Conference - Discussion of Module 1.

### WEDNESDAY, JUNE 17

Urban Land Use - W. Theodore Mealor

Task Force Conference

Task force editing and refining of the additional thirty (30) activities.

Activity Development - Each person must have ten (10) activities completed by 3:00 P.M., Thursday, June 18.

#### THURSDAY, JUNE 18

Activity Development - Each person must have ten (10) activities completed by 3:00 P.M.

#### FRIDAY, JUNE 19

·Task Force Conference

Task force editing and refining of the additional sixty (60) activities.

Each task force must turn in to the project director completed folders two (2) and three (3) by 3:00 P.M.

WEEK 4

#### MONDAY, JUNE 22

Task Force Conference - Discussion of Modules 2 and 3.

Activity Development - Each person must complete six (6) activities by 3:00 P.M.

#### TUESDAY, JUNE 23

Task Force Conference

Task force editing and refining of the additional thirty-six (36) activities.

Each task force must turn in to the project director completed folder four (4) by 3:00 P.M.

### WEDNESDAY, JUNE 24

Task Force Conference - Discussion of Module 4.

Activity Development - Each person must complete six (6) activities by 3:00 P.M.

## THURSDAN, JUNE 25

Geography: A Synthesis for the Social Studies - W. Theodore Mealor

Task Force Conference

Task force editing and refining of the additional thirty-six (36) activities.

#### FRIDAY, JUNE 26

Each task force must turn in to the project director folder five (5) by 9:30 A.M.

Task Force Conference - Discussion of Module 5.

Project Summary

APPENDIX E

EDIC



Memphis City Schools . 2597 Avery Avenue . Memphis, Tennessee 38112 . Phone (901) 454-5220

Reply To The Office Of

Central Area Administration Building 2385 Central Avenue - Memphis, Tenn. 38104

August 14, 1981

TO:

Dr. Duane .M. Giannangelo

Project Director

FROM:

L. Patrick Davis

Instructional Consultant

SUBJECT: Evaluation of Samples of Geography Activities

Please allow me to thank you for giving me the opportunity to evaluate some of the sample activities from the National Science Foundation Geography Project dealing with Spatial Concepts of Urban Geography. This logical approach combined with sound organization provides some realistic strategies to incorporate spatial concepts of Urban Geography in the secondary social studies curricula. The sample activities are applicable to concepts in a variety of subjects in the social studies curricula in the Memphis City Schools. The project provides insights for students at different socio-economic and intellectual levels.

The quality of teaching the secondary social studies in the Memphis City Schools will continue to be improved with professional instructional projects of this nature developed by Memphis State University, the social studies teachers in the Memphis City Schools and others.

LPD/enj